

## ABSTRACT OF THE DISCLOSURE

The contour correction processing of a still picture that can suppress the generation of a black edge due to an undershoot in a contour portion is enabled while increasing a feeling for resolution. Moreover, an interpolation device that improves the sharpness of a digital picture is provided without increasing a circuit scale. A digital video signal  $S_1$  from an input terminal 6 is supplied to a selection mean 5 after a contour to which an undershoot and an overshoot were added was corrected by a contour correction means 1. Moreover, this digital video signal  $S_1$  is supplied to an edge detection means 2 and the edge period is detected. An edge generation means 3 generates an edge signal  $S_E$  based on the detected edge period, the digital video signal  $S_1$ , and an edge coefficient  $K$ , and mixes it with a digital video signal  $S_2$  output from the contour correction means 1 at a predetermined ratio. Accordingly, a digital video signal  $S_3$  in which the undershoot in the edge period was suppressed is obtained. The selection means 5 substitutes it for the edge period of the digital video signal  $S_2$  from the contour correction means 1 and a digital video signal  $S_E$  from a mixing means 4. Moreover, the digital video signal  $S_2$  output from a memory means 3 is supplied to the interpolation means 5, and the linear interpolation of a sample is performed. At the same time, an interpolation means 6 generates the edge signal  $S_E$  in the period at which an edge detection means 7 detected the edge

of the digital video signal  $S_2$ , and a mixing means 9 mixes this edge signal  $S_E$  and the digital video signal  $S_3$  from the interpolation means 5 at a desired ratio. A selection means 10 selects a digital video signal  $S_4$  from the mixing means 9 when an edge is detected by the edge detection means 7 and selects the digital video signal  $S_3$  from the interpolation means 5 in other periods.